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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicant: Phil Geng et al.

Title: VIA-IN-PAD WITH OFF-CENTER GEOMETRY

Docket No.: 884.387US1

Filed: December 29, 2000

Examiner: Jose H. Alcala

Serial No.: 09/751,614

Due Date: May 14, 2002

Group Art Unit: 2841

Commissioner for Patents
Washington, D.C. 20231

We are transmitting herewith the following attached items (as indicated with an "X"):

- ☒ A return postcard.
- ☒ An Amendment and Response Under 37 CFR 1.111 (8 Pages).
- ☒ Clean Version of Abstract (1 pg.).
- ☒ Clean Version of Pending Claims (4 pgs.).
- ☒ Red-lined Figure 8 (1 pg.).
- ☒ Formal Figures (6 pgs.)

Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional required fees or credit overpayment to Deposit Account No. 19-0743.

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on this 13 day of May, 2002.

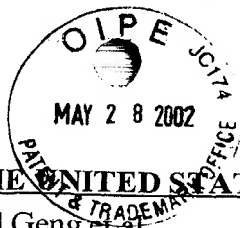
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PATENT

Applicant: Phil Geng et al.

Examiner: Jose H. Alcalá

Serial No.: 09/751,614

Group Art Unit: 2841

Filed: December 29, 2000

Docket: 884,387US

Title: VIA-IN-PAD WITH OFF-CENTER GEOMETRY (as amended)

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Commissioner for Patents
Washington, D.C. 20231

Applicants have reviewed the Office Action mailed on February 14, 2002. Please amend the above-identified patent application as follows.

IN THE DRAWINGS

FIG. 8 of the drawings was objected to by the Examiner. Enclosed is a copy of FIG. 8 showing proposed amendments in red ink. Solder balls 122 can solidify in at least two different ways following solder reflow. As illustrated in the left-hand via 115 in FIG. 8, the lower surface of solder ball 122 forms a slight upward curvature above the upper opening of via 115. As illustrated in the right-hand via 115 in FIG. 8, solder ball 122 extends down slightly into via 115 but does not contact via cap 119. No new matter has been introduced through the proposed amendments to FIG. 8.

A formal drawing sheet containing the proposed amendments to FIG. 8 is being submitted with this response in anticipation of the acceptance of the above proposed amendments. Applicant is also enclosing a complete set of formal figures.

IN THE TITLE

The Title was objected to by the Examiner. Please amend the Title as follows:
VIA-IN-PAD WITH OFF-CENTER GEOMETRY

IN THE ABSTRACT OF THE DISCLOSURE

The Abstract of the Disclosure was objected to by the Examiner. Please substitute the Abstract in the appendix entitled Clean Version of Abstract for the previous Abstract. Following is a marked-up version of the Abstract:

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